ABSTRACT

Chronic wounds are an economic burden to the patient as they put them out of work and consume quality working days. Utilization of laser therapy to successfully treat a non-healing ulcer of the lower extremity is profiled. Prior to initiating laser therapy, this particular lesion had continued to increase in dimension. Laser therapy applied over a course of three weeks stimulated granulation tissue formation in the wound bed and re-epithelisation of the ulcer thus enhancing wound healing. Laser therapy is a useful tool to heal ulcers in a short time.

Randomized control study to test the efficacy of low level red laser 635nm wavelength on diabetic foot ulcer healing done at RGGGH, Chennai over 7 months period from February 2017 to august 2017.

Total of 164 patients studied and divided into study and control groups.

Randomized into two groups

Control=82

Cases =82

Cases received red laser therapy using wavelength 635nm daily half an hour for 3weeks whereas controls received only saline dressings. Ulcer areas were measured before initiation of therapy and measured at 1st week.2nd week,3rd week after initiation of therapy.

Datas obtained were entered in Microsoft excel spreadsheet. Datas were entered as rates, percentages and ratios. Comparison was done by using chi square test, unpaired t test. Intra group comparison was done by ANOVA test. P Value equal or less than 0.05 was taken as significant.

DFS is more common in males between 55-65yrs.Males to female ratio is 3:1.Trauma is the most common triggering factor.

After three weeks of therapy mean reduction in ulcer area in study group as 1044.80±264.09mm2 and 324.26±84.81mm2 In control group. Difference between two group is statistically significant. LLLT for diabetic foot ulcers is an adjunctive therapy can be recommended to all diabetic foot ulcers.

KEYWORDS:

LLLT, 635nm, Biostimulation, DFS, Neuropathy, foot care, peripheral vascular disease, wagner grading, wound contraction, chi square test, insulin.